<u>Limited Weld</u>

- 1. Driver safety is highest priority. Protect yourself and others
- 2. Any American made car can run with the following exceptions; No 4x4's, ambulances, hearses, trucks, limousines, etc.
- 3. NO SWAPPING OF FRAMES, MUST BE STOCK.
- 4. Wagons must have rear window with a minimum of 14" tall by a maximum of 4" wide at normal window opening. Please message with questions or approval
- 5. Up to 8 Entries allowed

CAR PREPARATION

- 1. No frame modifications unless specified by class, no boxed frames or loaded bumpers allowed
- 2. All cars must be stock unless modification is stated in the rules.
- 3. All glass, plastic, chrome, and interior must be removed from the car before arriving to the derby.
- 4. All trailer hitches and braces must be removed.
- 5. Batteries must be moved to passenger front floorboard. They must be properly secured and covered.
- 6. You must have a number in Bright colors on each front door and must have a 15"x15" sign on the roof of your car with car number. You cannot use the roof sign to strengthen the car.
- 7. You must use a radiator and it must be in stock location.
- 8. All cars must have working brakes when you cross the ramp. If the car is not able to exhibit the ability to stop it will not be inspected.
- 9. You can run shifter through the floor, and you can have a switch panel. If you are running an electric fuel pump, it must be hooked up to your ignition switch, so when your car shuts off so does the fuel pump.
- 10. You may cut wheel wells for tire clearance. Fenders may be bolted together, or you may roll your fender once and weld them. You may do one or the other not both.
- 11. No radiator guards in front of or behind radiator. No spray foam can be used around radiator and the supports.
- 12. Sheet metal/panel creasing is allowed

TIRES

- 1. Tires no bigger than 17 inch rim
- 2. No split rims
- 3. No aluminum wheels, steel only
- 4. No studded tires.
- 5. Foam filled or doubled tires are OK- we don't want any flats!!!
- 6. Valve stem protectors are OK. Tires may be screwed to rims.
- 7. No bracing or bead locks on the outside of the rims.
- 8. Agricultural/Directional Tires are allowed.

ENGINE & TRANSMISSION

- 1. Use engine of choice, engine must be in stock location.
- 2. Transmission pan and engine oil pan may be plated for protection. ¹/₄" plate maximum and this plate must be same width and length of pan only and welded to pan only.
- 3. Transmission crossmember may be moved and located to mount to transmission tail shaft housing mounts and can only be a maximum of 2"x3"x 1/4" rectangular tubing. Tubing may be welded or bolted to frame rails.
- 4. Motor plates are allowed, 3/8" thick maximum. 4"x6" plate maximum to mount to the cross member.
- 5. Transmission coolers are allowed. These coolers cannot be placed to reinforce the car.

REAR DIFFERENTIALS

- 1. Use rear end of choice but must be no more than 8 lugs
- 2. No agricultural rear ends
- 3. You can tilt rear end
- 4. Welded or posi-track highly recommended.
- 5. Slider drivelines are acceptable.
- 6. Axle Savers are allowed

FUEL SYSTEM

NO PLASTIC FUEL TANKS WILL BE ALLOWED! There is no gray area in fuel system safety. Make it safe or you will not run.

- 1. Original gas tanks must be removed. You must use a boat tank or well made metal fuel cell (7 gallons maximum), and it must be properly secured and covered.
- 2. Only metal tanks may be used. Fuel line must be secured and fastened properly, metal line is highly recommended with a maximum of 8" of rubber line on either end. Fuel lines must run inside the car and be protected. Keep away from exhaust. Fuel lines are recommended to be covered.
- 3. Place fuel cell behind the driver's seat or in the center of the car where the backseat was. No other source of gas inside the car at all. No gas tank or gas line may extend past the rear seat area of the vehicle.
- 4. Protection bars around the fuel cell inside the car are allowed, they may not reinforce the structure of the vehicle in any way

DRIVER CAGE

- A roll bar or halo must be installed behind the driver seat that extends to or above the roof line with round, square or rectangular tubing minimum 3" to a maximum of 8". Roll bar or halo may not be welded to the body in any way. Smaller tubing may be used if it is proper materials (ie. DOM tubing, roll cage material) and designed properly to withstand heavy impact (this may be up to a judges discretion)
- The roll bar or halo can be directly welded to the top of the frame rails or mounted to the floor of the vehicle with a maximum of 12"x12"x3/8" steel plate. Steel plate can be mounted by welding or bolting to the floor. Only two vertical bars are allowed. The roll bar or halo needs to be able to support the weight of the vehicle in case of a roll over incident.
- 3. A horizontal seat bar may be welded between the vertical halo bars or between the door posts at seat back height and another horizontal bar may be installed 6" above the floor height behind the driver seat or you may weld bars in an "X" behind the seat between the halo bars, these bars may not be welded to the frame, only welded to the halo. These bars may not be welded to the body in any way. It is recommended to secure safety belts to the cage if using aftermarket belts.
- 4. A dash bar is to be installed between the lower area of the "A" pillar to replace the original dash. Two vertical bars can be installed from the dash bar to the top of the frame on the inside of the front door seam. The vertical bars can be welded to the top of the frame or attached to the floor with 12"x12"x3/8" steel plate. The steel plate may be attached by welding to the floor pan or bolted through the floor pan. All tubing must be 4" maximum. Dash bar can be made of 6"x6" angle iron.
- 5. Horizontal door bars may be installed on both sides of the vehicle inside the front doors only. The driver side may have up to three horizontal bars, one at the floor level to protect the foot area, one in the middle of the door and one at the lower side window level. They may be welded to the vertical bar at the dash bar to the halo bar vertical bar. The driver side door bars may be plated fully with ¼" plate to protect the driver. The

passenger side may have two horizontal bars, one at the bottom and one at the lower window level. Horizontal bars must not exceed 6" past the door seams on the front or rear of the front door. Driver side window opening needs to remain large enough to enter and exit the vehicle quickly in case of emergency. These bars may not be welded to the body in any way. 4" maximum tube size.

- 6. "A" Pillar support vertical bars may be installed inside the "A" pillar from the dash bar up and across the inside top of the windshield area. Horizontal bars may be installed from the "A" pillar support to the halo or roll bar. These bars may not be welded to the body in any way.
- 7. Windshield bars must be installed, a minimum of two bars and a maximum of four bars are required directly in front of the driver from the dash bar to the windshield bar or the body for safety. 2"x2" square tube or 3"x3/8" flat bar is recommended, can be covered in expanded metal as well for additional protection if wanted.
- 8. You may weld one 2" diameter rear bar in the center of the rear window from the halo bar to the first 6" of sheet metal on the rear valance area in the trunk area for driver protection. Wagons may weld a rear bar from the halo to the body at the rear of the rear tire inside the vehicle, if the halo bar is outside the vehicle and hole may be cut in the roof to allow the bar inside to be attached. The rear window opening must be 14" or larger on all wagons
- 9. Frame kicker support bars from the vertical dash bars to the front frame area will be allowed. Kicker bars are to not exceed 12" past the front of the firewall to the front of the kicker bar.
- 10. A support frame for the fuel cell will be allowed. The support frame can be welded to the halo and seat bars to protect the fuel cell. The fuel cell support frame may not be welded or attached to the frame or body in any way.

BUMPERS

- 1. Front or rear bumpers may use any factory inner and outer automobile bumper or 5" X 5" 3/16" square tube with open ends and nothing inside.
- 2. Bumpers can be no wider than tires front and back.
- 3. Bumpers may be mounted with any automobile bumper bracket and shock mounted on one side of frame extending no farther back than the first 12" of frame, can use 4" X 4" ¼" plate to mount bumper to the shock or 12" of ¼' plate with 4" wrapped around front to mount bumper, this plate can NOT exceed the width of the frame. Pick ONE mounting method only.
- 4. Rear bumpers may have two straps 2" x 3/8" thick may be welded from trunk to the bumper. When welding these straps to either side. Only a total of six inches may be welded to hold it onto the bumper or trunk on either end.
- 5. Front bumpers can have two straps 2" X ⅔" thick may be welded 6" on bumper and 6" on radiator support. The bumper brackets must be touching the bumper

TRUNKS & HOODS

- 1. TRUNKS You can fold hoods or trunk lid over. Do not slide your hood or trunk forward or back, trunk must remain on hinges.
- 2. YOUR TRUNK LID MAY BE V'D IN THE CENTER, BUT MUST REMAIN AT LEAST 8" OFF THE TRUNK FLOOR, the 8" will be measured from the top of the frame rails not the spare tire hole. If you tuck the trunk lid to the trunk floor you can only use 12" from the end of the trunk cavity and a total of 24" to attach to the floor in a 6" on 6" off welding pattern.
- 3. Trunk lids must have a 12 inch hole cut in the center of trunk for inspection purposes, inspection hole may have 3 -3/8" or less bolts and 1.25" diameter washer bolting the two layers back together.
- 4. 2 1" All-thread may go from the trunk lid to the frame or trunk pan vertically, If it passes through a body mount hole you must have a 1" spacer between the body and frame. You may weld all thread to side of frame vertically not to exceed the bottom of frame.

- 5. You may have plates for trunk tie down sheet metal to sheet metal only a maximum of 4" x 4"- ¼" square. No plates welded to frame.
- 6. HOODS Hoods must have at least a 12 inch square hole over air cleaner cut out in case of fire. Any holes in the hood may be bolted back together with 3/8" or less bolts and 1.25" diameter washer no more than a total of 12 bolts allowed to pinch the hood sheet metal back together. You may cut multiple holes but do not exceed the 12 bolts. You may have up to four 1" all-thread with 4" X 4" square or round washers on top to hold the hood down, all thread may go from the hood to the frame and be bolted or welded. All thread can not attach to sub-frame. All hood bolts must be placed outside the windshield bars. All bolts must be vertical. No welding of hood to the bumper. Can also use 3 per side ½" angle iron 6" long with two ¾" bolts. Hood MUST be opened for inspection or large enough cut out to see engine fully for inspection.
- 7. Trunk lids may be chained/ wired/welded/ bolted from sheet metal to sheet metal. No welding trunk to bumper. All doors and trunk can use 3" by 1/8" strapping or ¼ rod for filler to weld seams.

SUSPENSION

- 1. Suspension must be stock height. Bumper height not to exceed 24" to the bottom of the bumper to the ground and must be a minimum of 14" from the ground to the bottom of the bumper or frame both front and back.
- 2. Leaf springs must be stock and made of stock spring material, with a minimum 1" stagger and no springs can be as long as the main leaf. You can only have a total of 8 leaf springs per side, no thicker than 3/8" thick and no wider than 2 ¾" wide. The main leaf must be the top spring in the spring pack and leaf springs must go down from longest to shortest. You can re-clamp springs, 4 clamps per side. Homemade clamps can't exceed 2x4x1/4".
- 3. Coil springs can be changed to a stiffer spring or add a spring. You may run up to 1" bolt from your rear end housing to the package tray no chains will be allowed. You can either bolt or chain your rear end in, DO NOT do both.
- 4. You cannot change the length of trailing arms to shorten or extend them. Rear control arms must be stock but can be reinforced. You may weld them solid.
- 5. Do not raise the suspension any other ways except what is listed above.
- 6. You can bolt, wire, or chain coil springs to rear-end and frame to prevent springs from falling out, do not go through body as this would be another body mount.
- 7. You may weld leaf spring mounting brackets to prevent them from becoming unbolted. You can loop chain or wire (1 loop of 3/8" chain or 4 loops of #9 wire) from rear end to frame in 2 spots on each side, must go around frame, do not bolt the chain to the frame.
- 8. We are going to allow you to weld the chain to the side of the frame, for your chains from the frame to the rear end, you can weld one link only to the side of the frame if you choose to weld the chain instead of wrapping it around the frame.
- 9. When attaching leaf spring brackets you will be allowed to use 4x4 ¼" square tubing no longer than 4" to be welded to each side of the frame rail. Do not reinforce factory mounting plates.

10.

STEERING

- 1. Tie rod tubes may be manufactured but must stay close to the same length and must mount in the same configuration as stock.
- 2. Aftermarket spindles are allowed. Do not re-engineer the way the steering components mount to the frame.
- 3. Upgraded ball joints and tie rod ends are allowed
- 4. Upper control arms can be welded down with 2"X4" ¼" plate

WELDING

- All doors must be chained, wired, bolted, or welded shut. Drivers' door may be welded inside and outside. Drivers door may be welded shut with strap no bigger than 3" by 1/8" thick on the outside seam. It is highly recommended to reinforce your driver's door with a minimum of 1/8" plate and may not exceed 6" past each driver's door seam. We strongly suggest plating the whole door. In this type of competition all drivers doors will take some type of hit during the event. We want you to be safe and protected behind your reinforcement. ALL OTHER DOORS AND TRUNK MAY BE FULLY WELDED WITH 3" BY 1/8" STRAPPING OR ¼ INCH ROD FOR FILLER IS ALLOWED.
- 2. Firewall forward you may also weld two 1/4" solid beads on frame seams only over existing manufacturers weld. MUST LEAVE ONE FRAME HOLE OPEN FOR INSPECTION IN FRONT OF FIREWALL ON EACH RAIL.
- 3. FRAME PATCHING ALL frame patches will be painted WHITE and have a ½" drilled to determine thickness, all frame patches ¼" maximum thickness, must be done or you will NOT pass inspections. Allowed 12" firewall forward, 6" behind front of front door seam and 12" hump plates. All patches and hump plates behind firewall will be mounted on the outside of the frame. NO patches can exceed the width of the frame. Fresh or preran cars can have patches.
- 4. BODY MOUNTS Body mount bolts and spacers can be replaced or discarded. No bolts larger than 5/8" with washers no larger than 3".
- RUST REPAIR/PATCHING You can patch rust holes in sheet metal with sheet metal only. Do not cut rust out; weld
 2" beyond rust. Patching you are allowed to patch a hole in the passenger side by only using a maximum of
 4"x4" patches maximum 18 gauge metal, patches not allowed to touch each other to fill the hole.